A COMPARISON OF PEER-DIRECTED AND TEACHER-DIRECTED EMPLOYMENT INTERVIEW TRAINING FOR MENTALLY RETARDED ADULTS

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Interview skills deficits may limit employment prospects of mentally retarded adults. Although numerous papers highlight the importance of interview skills, few have validated effective strategies for use with mentally retarded persons. Further, there has been a lack of research contrasting rival interview skills training strategies. The present study was conducted with two mentally retarded young adults. It contrasted peer-directed instruction, in which both participants were equally deficient in the target skills, with teacher-directed instruction. Results of the investigation indicated that instruction, rehearsal, and feedback may be effective strategies regardless of who provides instruction. Comparisons of teacher-directed and peer-directed instruction indicated little or no difference in the effectiveness of the two procedures. However, the peer-directed procedure involved considerably less staff time than did the teacher-directed procedure.

DESCRIPTORS: peer training, employment interview training, job finding skills, alternating treatments design, generalization

Although researchers emphasize the importance of employment interviewing skills for mentally retarded persons, little empirical evidence exists supporting the value of specific training strategies (Kelley, Laughlin, Clairborne, & Patterson, 1979; Miller & Schloss, 1982). Furthermore, existing reports usually demonstrate that a "package" of applied behavior-analytic strategies is effective when contrasted with a baseline providing no instruction. Therefore, a critical need exists for applied research demonstrating the relative efficacy of various interview skills training strategies.

Of particular interest are strategies that are maximally effective while requiring minimal instructional resources. For this reason, the present study contrasts two instructional formats. The first is traditional teacher-directed instruction with a 2:1 client-to-teacher ratio. The second involves peer-directed tutoring in which both clients in a tutoring dyad are equally deficient in the target skills. This is a major departure from other demonstrations in which one participant is competent in the instructional content.

The peer-directed format, if demonstrated to be as effective as teacher-directed training, would have the following advantages: A positive influence on clients' attitudes toward the subject matter (Cohen, Kulik, & Kulik, 1982), enhanced cooperation between participants (Pigott, Fantuzzo, & Clement, 1986), reduced teacher involvement (McKellar, 1986), and an increase in engaged time (Greenwood et al., 1984). In addition, participation by both peers may facilitate equal progress toward the instructional objective.

METHOD

Subjects and Setting

Participants in this study were two adult mentally retarded females. One woman was 23 years old and had an IQ of 69 as measured by the Wechsler Adult Intelligence Scale. The second woman was 23 years old and had an IQ of 64 as measured by the same scale. Previous attempts to secure employment outside of a sheltered workshop had been unsuccessful because of difficulties encountered during employment interviews.

Peer-directed and teacher-directed instruction was conducted in a large (12 m by 14 m) conference

room in the Speech and Hearing Clinic at Penn State's University Park campus. Individual assessment sessions were conducted in small (3 m by 3 m) therapy rooms. In both rooms, participants were seated at a conference table in the center of the room.

Interview Question Selection and Prebaseline Assessment

Over 400 interview questions were obtained from a survey of 40 employers in service, light industry, and consumer-related businesses. Questions requesting the same information were grouped together, resulting in 80 distinct questions. These questions were categorized under headings of personal information, work history, or educational history and were ranked based on the frequency with which they were supplied by employers. The actual wording used for each question was the wording used most frequently by employers. Appropriate answers for each question were developed by the investigators in consultation with the participants and selected employers. Sample items and responses in each of the three categories are as follows: Personal—Q. Where were you born? A. I was born in State College, Pennsylvania; Work—Q. Where have you worked before? A. I worked at the College Diner; Education—Q. What was the highest grade you completed? A. I graduated from high school.

The participants were subsequently asked the 80 questions once each on two separate days. The 20 questions in each category that produced the most errors were included for use in the study. Finally, generalization assessment items were developed using 60 questions requesting the same information as the original 60 questions.

Instructional Materials Preparation

An interview question card deck was prepared for each participant by typing each training item on the front of an index card. Appropriate answers were typed on the back of the respective cards. Finally, a column of 10 boxes labeled "+" and an adjoining column of 10 boxes labeled "−" were printed on the left side of the back of each card. A poster was prepared illustrating the steps to be used in the peer-directed instruction and teacher-directed instruction. Finally, an "order card" was used to assist the participants in remembering tutoring activities.

Baseline and Training Assessment

An equal number of trained items in each of the three categories was designated for use in teacher-directed and peer-directed instruction. No distinction between teacher-directed and peer-directed items was made for the generalization items.

The same assessment procedure was used during baseline training, posttraining, and follow-up assessments. Specifically, the participants entered simulated interviews conducted by one of four graduate students. The interviewers asked five questions from each of the six groups of trained items and five questions from each of the three groups of generalization items. All items within these groups were selected at random and presented in a logical order.

Reliability

One fourth of the simulated interviews were scored by an independent observer who was seated behind a one-way mirror. A reliability quotient was produced by dividing the number of responses for which both observers recorded a "+" or a "−" by the number of questions scored. The resulting reliability level for personal questions was .96, for work questions 1.0, and for education questions 1.0.

Experimental Design

A multiple baseline across the types of interview questions with alternating treatments embedded in each leg of the multiple baseline was used to control for threats to internal validity. The first major question answered using the design was whether interview training was generally effective in improving responses to trained and generalization interview items. This would be determined by an increase in appropriate responses to trained and generalization items corresponding with the onset of training in the specific area. The second major question answered using the design was whether teacher-directed instruction was superior to peer-directed in-

struction or vice versa. This would be determined if responses taught using one of the strategies improved more quickly than responses taught using the other strategy.

Once a stable baseline was achieved, training was initiated on the first group of questions (personal history). In the first session, one form of instruction was used (i.e., teacher-directed or peer-directed instruction) with the corresponding set of questions. In the second session, the alternate form of instruction was used with its corresponding set of questions. The order of instruction was determined daily by tossing a coin. Also, the two sessions were separated by a 15-min snack break. The second session was followed by the simulated interview that included an equal number of randomly selected questions that were used exclusively for peer-directed instruction and teacher-directed interview training. Randomly selected generalization questions not used in training were also presented.

Peer-Directed Instruction Procedures

Prior to collection of baseline data, participants were taught the peer-directed instruction procedures using interview questions drawn from the original pool of 80 questions but not selected for use in training. These items were substantially different from those used in the actual study to avoid bias toward any one condition. Training procedures followed a system of least prompts. The trainer modeled each step in the task sequence, then asked the participant to perform the sequence. For each step, 3 s were provided for independent performance. If a nontarget behavior occurred, or if no response occurred, a verbal prompt was given. Again, 3 s were provided, and nontarget responses or no responses were then followed by a modeling prompt. Feedback and verbal praise were provided following each correct step.

The peer-directed instruction procedure was initiated by one participant placing a token on the first square of the order card and reading the question printed on the first card in the interview question card deck. She then waited 5 s for a response. If the other participant's response matched the response on the back of the question card, she fol-

lowed the prompts on the poster by saying "That is right. I asked — and you answered —. Go on to the next question." She then marked the first "+" box on the interview question card. If the response did not match the response on the back of the card, the participant said "No, that's not right. I asked — and you should have said —. Repeat the question." She then marked the first "−" box on the interview question card, moved the order token to the second square, and repeated the question.

If the participant provided a matching response on the second attempt, the positive feedback statement was given. If the second response did not match, corrective feedback was given and the order token was moved to the third square. Then the interview question was read a third and final time. If a matching response was given, the positive feedback statement was used. If an incorrect response was given, the question was asked again and the card was turned to face the participant. After the participant read the correct answer, the positive feedback statement was used. The "+" and "−" boxes on the interview question cards were scored only for the first attempt. When three "+" marks were checked in a row, the card was removed from the deck.

Training in the use of peer-directed instruction continued until both participants were able to follow the training sequence without extraordinary assistance. This required five 15-min sessions.

Following baseline data collection, peer-directed instruction began using the same procedures except that the cards designated for use in the personal history area for peer-directed instruction were presented. Training continued with these cards over 15-min periods on successive daily sessions until no cards remained in either of the participants' peer-directed or teacher-directed decks. In the following 15-min period, instruction shifted to the work history question deck. Again, training continued on these cards through 15-min periods until all were removed from the deck. In the session following the one in which all cards were removed from both the peer- and teacher-directed decks, the educational history questions were used. Training was
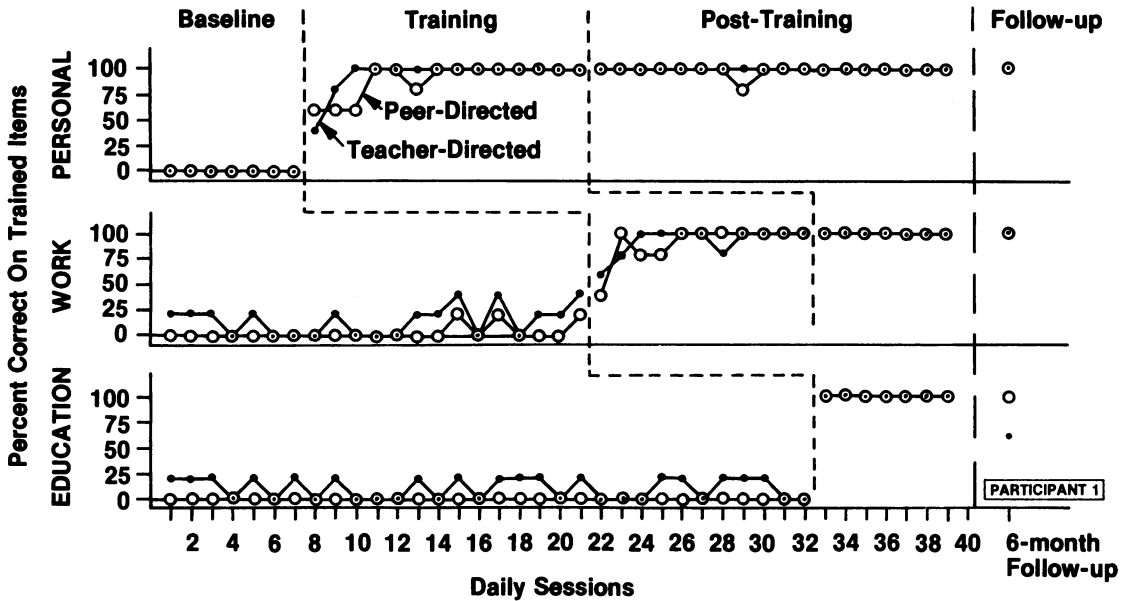
Figure 1.   Multiple baseline and alternating treatments analysis of teacher- and peer-directed interview skill training for the first participant's trained items.

completed when the educational history cards were exhausted.

Teacher-Directed Instruction Procedures

Teacher-directed instruction was conducted by a graduate student in special education. The procedure corresponded with that used in peer-directed instruction except that questions were read, responses were recorded, and feedback was provided by the graduate student.

Procedural Reliability

The extent to which the participants and graduate student followed the instructional procedures was evaluated in one fourth of all peer-directed and teacher-directed training sessions. An evaluation instrument was developed that included all of the steps of the training procedure. A "+" was scored next to each step that occurred in the proper sequence. A "−" was scored next to omitted steps or steps that occurred out of order. A procedural reliability coefficient was produced by dividing the number of steps scored "+" by the number scored "+" and "−." The lowest procedural reliability check for the graduate student was .98. The lowest procedural reliability check for the first partic-

ipant was .90, and the lowest reliability check for the second was .94.

RESULTS

Figures 1 and 2 report the effects of the peer-directed and teacher-directed instruction procedures on the three question categories. Figures 3 and 4 report generalization data for the participants' number of correct responses that was sustained throughout the study.

These results indicate that the accuracy of responses to personal, work, and educational questions in simulated interviews improved substantially commensurate with the onset of training in each of these areas. The results were obtained both for interview questions used in training and for generalization questions. A 6-month follow-up revealed maintenance over time for one participant. The other demonstrated a decrease in performance. This decrease was associated with longer acquisition time, suggesting that individuals having greater difficulty in learning the interview questions may have greater difficulty with maintenance. In this case, booster sessions may be warranted if a long
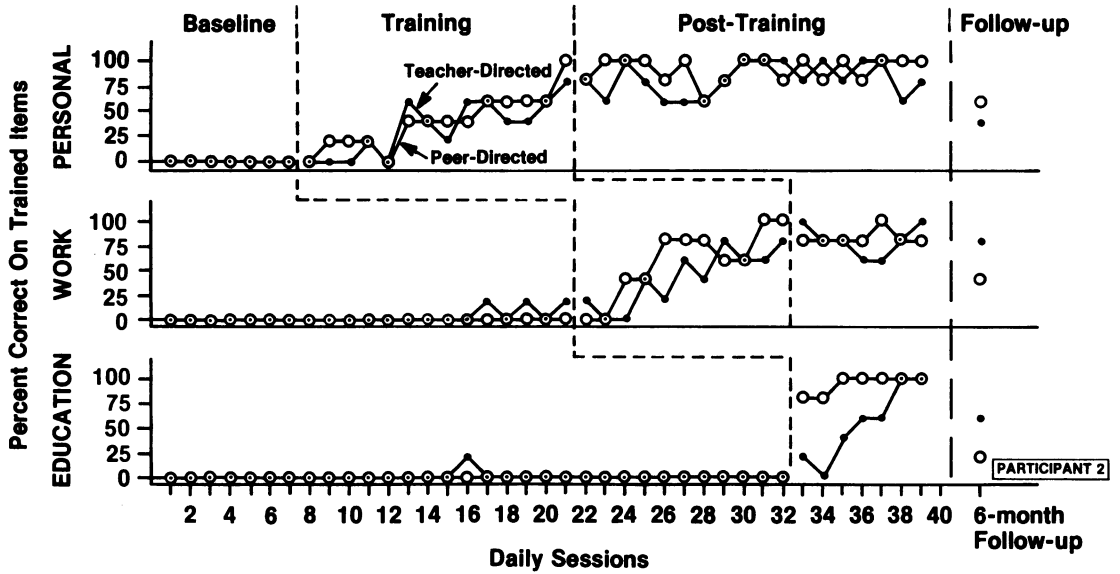
Figure 2. Multiple baseline and alternating treatments analysis of teacher- and peer-directed interview skill training for the second participant's trained items.

period of time elapses between training and interview.

Results for the alternating treatments contrasted between teacher-directed and peer-directed instruction showed no difference in the efficacy of the two procedures.

DISCUSSION

The relative merits of peer-directed instruction may be judged by criteria other than the rate of acquisition and maintenance. Even though peer-directed instruction may not be instructionally su-
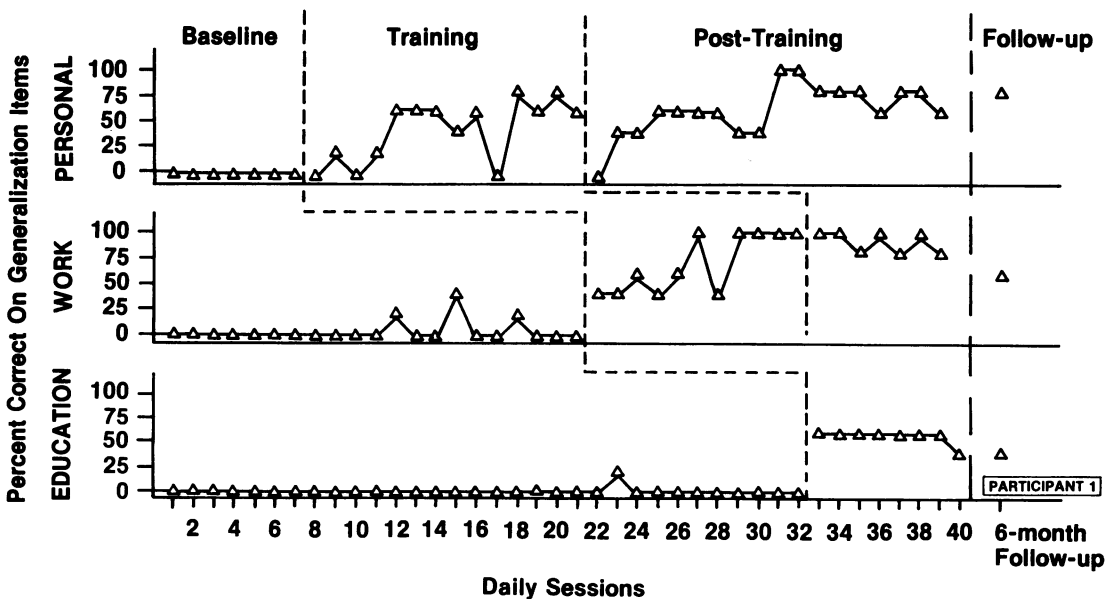

Figure 3. Multiple baseline analysis of interview skill training for the first participant's generalization items.
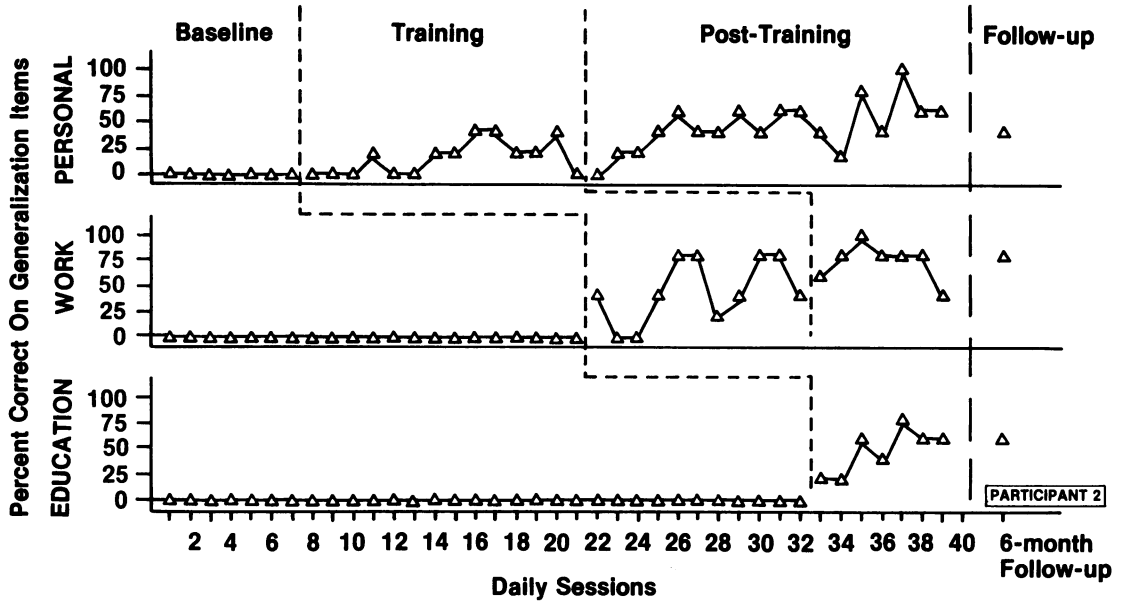
Figure 4.   Multiple baseline analysis of interview skill training for the second participant's generalization items.

perior for a given participant, it may be substantially more convenient and efficient. Teacher-directed instruction, as used here, required the full-time participation of a professional for a minimum of 30 min per day. Peer-directed instruction required professional participation for approximately 5 min (to organize and distribute materials). Periodic checks were also required, using an additional 3 to 5 min of professional time. The remaining time could be devoted to instruction with other students.

The systematic process used to obtain questions provides some support for the generality of training. Shortly after the conclusion of training, both adults participated in actual employment interviews. As a result of their successful performance in the interviews, the first participant obtained employment at a fast-food restaurant and the second participant was employed at a day-care center.

REFERENCES

Cohen, P. A., Kulik, J. A., & Kulik, C. C. (1982). Educational outcomes of tutoring: A meta-analysis of find-

ings. *American Educational Research Journal,* 19, 237–248.

Greenwood, C. R., Dinwiddie, G., Terry, B., Wade, L., Stanley, S. O., Thibadeau, S., & Delquadri, J. C. (1984). Teacher- versus peer-mediated instruction: An ecobehavioral analysis of achievement outcomes. *Journal of Applied Behavior Analysis,* 17, 521–538.

Kelley, J. A., Laughlin, C., Clairborne, M., & Patterson, J. (1979). A group procedure for teaching job interviewing skills to formerly hospitalized psychiatric patients. *Behavior Therapy,* 10, 299–310.

McKellar, N. A. (1986). Behaviors used in peer tutoring. *Journal of Experimental Education,* 54, 163–167.

Miller, S. R., & Schloss, P. J. (1982). *Career-vocational education for handicapped youth.* Rockville, MD: Aspen.

Pigott, H. E., Fantuzzo, J. W., & Clement, P. W. (1986). The effects of reciprocal peer tutoring and group contingencies on the academic performance of elementary school children. *Journal of Applied Behavior Analysis,* 19, 93–98.